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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,545	11/06/2001	Kuo-Pin Hsu	B-4366 619272-4	4702

7590 10/06/2003  
Richard P. Berg, Esq.  
c/o LADAS & PARRY  
Suite 2100  
5670 Wilshire Boulevard  
Los Angeles, CA 90036-5679

EXAMINER

RAMSEY, KENNETH J

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/035,545

Applicant(s)

HSU, KUO-PIN

Examiner

Kenneth J. Ramsey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

The amendment to claim 10 has been entered.

#### ***Prior Art Rejections***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi et al JP 10-340,669 (Asahi) in view of Ilcisin et al 6,027,661 (Ilcisin). Asahi et al discloses a process of forming a pattern of parallel address electrodes 8 on a substrate 2, forming a dielectric layer 9 over the address electrodes. See figure 1. Also, see corresponding US patent 6,368,696 which is deemed to substantially duplicate the disclosure of Asahi et al without adding any significant new matter because of corresponding patterns in the sequence of reference numerals and corresponding figures. It was also determined by the examiner that the Japanese patent contained the text "dry resist" as did the U.S. patent. To form the barrier ribs 3 of figure 1, first a rib material 12, 14 is laminated onto a carrier sheet 12 (figure 2) then the rib material is transferred to a substrate 21 which is the same as substrate 2 (having the address electrodes and dielectric layer thereon but not shown) and the carrier sheet removed (figure 3b). Then a dry resist film 43 is laminated onto the top black layer of the barrier ribs and exposed through an exposure mask to form the pattern of barrier ribs parallel to the address electrodes and the unwanted barrier rib material above the address

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electrodes is removed by sandblasting using the dry resist film as a mask. Asahi et al differs from the claimed invention of claims 1, 4 and 5, in that it is not taught to employ a sandblast stopper material over the address electrodes prior to placing the barrier rib material. This is presumably because the dielectric layer is deemed to be sufficiently more resistant to the sandblast material than the barrier rib material, whereby substantially no harmful damage is caused to the dielectric. However, Ilcisin teaches a similar process wherein a sandblast stopper is employed to protect the underlying material, the sandblast stopper being patterned to correspond to the portion exposed to the sandblast. This is because it is important for the application of Ilcisin that the underlying layers not be damaged by the sandblast since polarized light is used in the application of Ilcisin. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to similarly employ a sand blast stopper in Asahi wherein polarized light is employed in the application or wherein other materials not as resistant to the sandblast material are employed since the prevention of damage to materials by this process is obviously required depending upon the proper circumstances. As to claim 1, lines 8-12, since Asahi teaches that the portion of the dielectric material exposed to the sandblast is at least as wide as the address electrodes, it would have been obvious to one of ordinary skill in the art at the time of applicants' invention to likewise pattern the sandblast stopper. As to claims 2 and 3, since the dry film resist taught by Asahi is resistant to sandblasting, it would have been obvious to one of ordinary skill in the art at the time of applicants' invention to employ the same resist as the sandblast stopper. As to claims 6-8, the layout of the sandblast resist and sandblast

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stopper in dimensions corresponding to their function as claimed would have been obvious to one of ordinary skill in the art to obtain a product without defects. As to claims 9 and 10 the ribs of Asahi are strip shaped horizontally and curved shaped vertically.

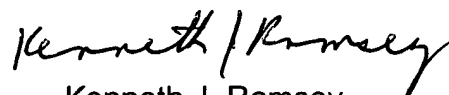
### ***Conclusion***

#### **Directions for Responses**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Ramsey whose telephone number is 308-2324. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.



Kenneth J. Ramsey  
Primary Examiner  
Art Unit 2879

KJR